

## Fall 2015 TSAAPT WORKSHOPS

Baylor University – Waco, TX

October 30 - 31, 2015

### FRIDAY AM

**W1** “**The Physics of Metallurgy, Environment, and Corrosion**”, presented by Evelyn Restivo, Global STEM ECHS and Karen Jo Matsler, UTA

Integrating the physics of metallurgy with environmental and corrosion chemistry is a transition into engineering and technology that is critical to produce more resilient, lighter, less expensive materials for future electronic products and safe, sturdy infrastructure. Many of the challenges associated with saving priceless treasures, bridges, buildings, and in general protecting our economy and way of life must be developed through a combination of engineering processes employing techniques designed with partnerships in physics.

**Limited to 24 participants – 2.0 hours – Cost \$10.00**

**W2** “**CASTLE on line**”, presented by Trina Cannon, Eastfield College

CASTLE has been a valuable curriculum for learning electricity. But the bulbs and wires are often a hindrance with setting up and cause a lost in time. Trouble shooting can often lead to distraction and frustration for both teacher and student. Here is a strategy that can get the job done, with no cost to you and the students can repeat the whole lab away from you. Bring a lap and get the plan. Make sure your laptop can logon the network at Baylor. (Some school laptops prevent this, so check with the IT department before you leave school) .

**Limited to 24 participants – 1.5 hours – Cost \$2.00**

### FRIDAY PM

**W3** “**Make and Take Demo and/or Lab Apparatus**”, presented by Bill Franklin, Retired physics teacher and former PTRA

Participants will have an opportunity to construct and try out demo or lab apparatus and take home what they build. Prefabricated parts and tools will be supplied. These are leftover kits from PTRA workshops.

**Limited to 20 participants – 2.5 hours – Cost \$2.00**

**W4** “**Forces in Action: Follow the Projectile**”, presented by Trina Cannon, Eastfield College

Now we need to do the physics but emphasize the engineering perspective. So let’s look at “Protecting” the egg in a launch vehicle. Just bring 2 empty 2-liter bottles. And we will be ready for fun in the field.

**Limited to 24 participants – 1.5 hours – Cost \$2.00**

### SATURDAY AM

**W5** “**Planck’s Constant**”, presented by Regina Barrera and Tom O’Kuma, Lee College and Stephanie Ingle, Kingwood High School, Houston, TX

Participants will have an opportunity to construct and try out a Planck’s Constant apparatus (and to make class sets of 8).

**Limited to 24 participants – 2.0 hours – Cost \$8.00**

**W6** “**Hollywood Physics**” presented by Kenric Davies, PTRA, Sherman High School, Sherman, TX

Workshop participants will break down scenes from movies like Back to the Future, The A-Team, Gone in 60 Seconds, Abraham Lincoln Vampire Hunter, and more! Participants will use physics concepts like Kinematics, Projectile Motion, Force, and Momentum while trying to answer the age old movie question “is that really possible?”

**Limited to 24 participants – 1.5 hours – Cost \$3.00**